DOCUMENT RESUME

ED 167 540 SP 013 947

AUTHOR	Bartunek, Jean M.
TITLE	Decision Characteristics, Participation Training, and Teacher Participation in Decision-Making.
PUB DATE	Apr 79
NOTE	29p.; Paper presented at the meeting of the American Educational Research Association (San Francisco, California, April 1979)
EDRS PRICE	MF-$0.83 HC-$2.06 Plus Postage.
DESCRIPTORS	*Decision Making; Management by Objectives; Organizational Development; *Participant Satisfaction; *Problem Solving; School Personnel; *Teacher Participation; *Teacher Role

ABSTRACT

This study investigated the effects of participation training, agreement, and decision importance on teachers' desires for participation in decision-making and their perceptions that participation would increase decision effectiveness. Results indicated that teachers who had received participation training preferred less participation in decision-making when there was disagreement among them than when there was agreement, and tended to believe that participation would be less effective when there was disagreement. On more important decisions, untrained teachers preferred more participation when there was disagreement than when there was agreement, and rated participation as more likely to achieve effective decisions when there was disagreement. Implications of the results for contingency models of participation and for participation training are discussed. (Author)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED167540

Decision Characteristics, Participation Training, and Teacher Participation in Decision-Making

Jean M. Bartunek

Boston College

I am grateful for the helpful comments of Christopher Keys, Charles L. Gruder, Robert Crowson, L. Rowell Huesmann, R. Timothy Stein, Edgar Huse and J. Keith Murnighan on earlier drafts of this paper. In addition, it was a pleasure to work with the teachers who participated in this research.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Jean M. Bartunek

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC) AND USERS OF THE ERIC SYSTEM."

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

Paper presented at the 1979 meeting of the American Educational Research Association, San Francisco, California.

Session Number: 32.07

SP013 947

Goal Agreement, Participation Training, and
Teacher Participation in Decision-Making

There has been an increasing awareness in recent years that participative decision-making (employee influence over decisions) is not appropriate for all organizational decisions. Rather, contingency approaches stress that the value of participation for any given decision depends on characteristics of the organization and its environment, of the organization members, and of the decision situation (e.g. Dachler and Wilpert, 1978; Locke and Schweiger, in press; Lowin, 1968; Vroom and Yetton, 1973). For example, Vroom and Yetton (1973) have presented a precise formulation of decision characteristics affecting the viability of participation from the point of view of a manager. They combined seven decision characteristics (the likelihood that some decisions would be of higher quality than others, managerial information about the problem, the degree to which the problem is structured, the importance of decision acceptance, likelihood of employee acceptance of an autocratic managerial decision, employee agreement with management about organizational goals relevant to the decision, and employee agreement on means of implementing decisions) and five decision styles (group participation or consensus, group consultation, individual consultation, request for information from individuals, no participation) in a "decision tree" a manager might use to decide how much employee participation is appropriate for any given decision.

In addition to presenting a normative model of participation, Vroom and Yetton also describe the effects of the seven decision characteristics on the amount of participation managers say they would like their employees to have.

However, employees also have perceptions of appropriate amounts of participation. Therefore, the present research investigates the effects of three factors (one organizational characteristic and two decision characteristics) on employees' perceptions of the amount of participation likely to be associated with effective decisions (i.e. decisions characterized by high quality and employee acceptance; c.f. Maier, 1970; Vroom and Jago, 1978). These three factors are 1) participation training: whether the employees have received training aimed at improving their participation skills and increasing their participation in decision-making, 2) agreement: the extent of agreement among employees and management on issues underlying the decision to be made, and 3) importance: the importance of the decision to the employees (its relevance to their major interests).

Vroom and Yetton (1973) presented case studies of problems containing different decision characteristics to managers and asked the managers how much employee participation they felt would be appropriate in each case. In the present study, a questionnaire which used cases similar to those designed by Vroom and Yetton was given to employees (elementary school teachers) who ranked the five decision styles described by Vroom and Yetton according to their value in achieving effective decisions.

Participation Training

The participation training examined in this study was a major component of a three year Organization Development (OD) intervention conducted in a large metropolitan parochial school system. The total intervention focused on organizational renewal in a number of areas (e.g. power sharing, increasing professional and interpersonal competence, developing shared goals, and developing more open classroom climates). The intervention is described in detail by Keys, Martell, Peltz, Bartunek, and Szaflarski. (1975). Training

components which focused on participative decision-making included three workshops for eight-member principal teacher teams from participating schools and a workshop conducted for the entire staffs of each participating school. During these workshops, OD consultants introduced the teachers to the idea that participation in decision-making tends to improve decision effectiveness. The trainers also described the value of viewing differences of opinion among group members as additional sources of information rather than threats (c.f. Schmuck, Runkel, Saturen, Martell, and Derr, 1972). During the sessions, workshop members practiced participation and conflict management skills.

In addition to the training given in the workshops, during the course of the project, teachers and principals in participating schools both received in-school consultation on participation from project staff members and used a participative process to design shared school goals. The present study examined the teachers' perceptions of appropriate amounts of participation towards the end of the third year of the program.

The participation training in this intervention was consistent with the theoretical presentations of OD practitioners who focus on decision-making. These practitioners stress the value of increasing employee participation in decisions (Huse, 1975). Specifically, they suggest that consensus is the most effective decision technique; it makes the best use of group members' resources, enhances the quality of problem-solving, and elicits the greatest acceptance and commitment from group members (c.f. Johnson and Johnson, 1975; Schmuck, 1972; Schmuck et al., 1972). These practitioners suggest that conflicts of opinion, if handled properly, can increase the quality of group decisions (Beckhard, 1969; Schmuck et al., 1972). Thus, they encourage group members to surface and confront differences of opinion during their decision-making process.

An assessment of the initial impact of the training (Keys and Bartunek, in press) indicated that by the end of its first year the intervention had been successful in increasing both participation in decision-making and conflict management ability. Teachers in the schools receiving training rated themselves as participating in decisions and surfacing and dealing with conflict significantly more than did control school teachers. Because of the focus of the training and of the results obtained by Keys and Bartunek, it was predicted that teachers in the schools receiving participation training (hereafter referred to as trained teachers) would rate the amount of participation likely to achieve effective decisions higher than would untrained teachers (H1).

Agreement

Vroom and Yetton (1973) devote a considerable amount of time to a discussion of manager-employee and employee-employee agreement. For example, they suggest that when there is manager-employee disagreement on organizational goals, consensus should be eliminated as a viable decision style, because employees' decisions may not further the organization's objectives. On the other hand, when there is goal agreement, but disagreement among employees over solutions to problems, high amounts of participation should be employed in order to achieve uniformity in problem solutions.

But how does the awareness that there is disagreement among employees and management affect employees' perceptions of the amount of participation likely to achieve effective decisions? Amount of agreement should not affect the trained teachers' perceptions (H2a). These teachers learned to surface conflicts and resolve them as part of the collaborative process; they learned that managing conflict was a standard component of participative

decision-making. However, March and Olsen (1976, ch. 3) suggest that the untrained teachers should rate the amount of participation likely to achieve effective decisions higher when there is disagreement than when there is agreement (H^{2b}). When there is agreement, the employees are likely to trust the manager to make decisions in the employees' favor, so feel little need for participation. When there is disagreement, however, employees are more likely to anticipate that their participation will make the decisions more congruent with their own interests and thus more effective.

Importance

Several authors (e.g. Lowin, 1968; Owens, 1970; Simon, 1976) suggest that employees have relatively little interest in participating in decisions of low importance to them: on these decisions they are more willing to accept decisions made by their supervisor. If teachers dislike participating in less important decisions, they should perceive the effort they are likely to invest in decision-making as lower on less important decisions. Thus, they should rate the amount of participation likely to achieve effective decisions lower on less important decisions than on more important decisions (H^{3}). OD practitioners (e.g. Miles, 1975) acknowledge that on less important decisions participation is not the most effective use of employee resources. Thus, the effect of decision importance should hold for both trained and untrained teachers.

Method

Research Participants

The participants were 93 teachers from nine elementary schools in a large metropolitan parochial school system. Thirty-five of the participants (the trained teachers) were from four schools that had received parti-

cipation training. Seventeen of these teachers were in the agreement condition and 18 were in the disagreement condition. The design was a mixed one. Therefore, all teachers were in both importance conditions.

Fifty-eight of the participants (the untrained teachers) were from five schools originally designated as control schools for the evaluation of the OD intervention. Twenty-nine of these teachers were in the agreement condition, and 29 were in the disagreement condition. Again, all control teachers were in both importance conditions.

The two groups of schools were comparable in size. Faculty size in the schools receiving participation training ranged from 9 - 22 teachers, while control school faculties ranged from 9 - 28 teachers. Mean numbers of faculty members in the two groups of schools were, respectively, 14 and 16. In addition, previous research (Keys et al., 1975; Keys and Bartunek, in press) indicated that the schools were equivalent on a number of measures of participation at the time training began. Thus, there is a high probability that the trained and untrained teachers came from the same population with respect to the factors investigated in this research.

The research participants were all the teachers at each school who had been teaching there since 1974 or earlier. The trained teachers had participated in at least one decision-making workshop. The teachers in all the schools had participated in at least one evaluation of the intervention.

Design

The experimental design employed in this study was a 2 x 2 x 2 factorial; participation training x goal agreement x decision importance.

The first two factors were between group measures, the third a within groups measure. Each teacher, therefore, responded to two decision situations which varied in importance but were similar with respect to goal agreement.

Materials

Vroom and Yetton describe their five decision styles in a form applicable to managers. For example, they describe "no participation" as, "You solve the problem or make the decision yourself, using information available to you at the time (Vroom and Yetton, 1973, p. 13)." The five decision styles were rewritten for this research in a form applicable to teachers. For example, "no participation" was reworded to state, "The principal solves the problem herself, using information available to her at the time."

Two case studies were used in the research. They were designed after interviews with the principals in the various participating schools. The two cases were based on problem situations existing in more than one of the schools, although neither reflected the actual situation at any participating school. The two decision situations were class plans (the frequency with which teachers should turn in class plans and the form the plans should take) and the dress code (the stringency with which teachers should enforce dress code requirements). Principal and teacher interviews, as well as pilot testing, indicated that the class plans decision was more important to the teachers than the dress code decision. Thus, the class plans decision was the more important case and the dress code decision was the less important case.

Two versions of each case were written, one in which there was disagreement among the teachers and principal with the policy underlying the decision to be made (disagreement condition), and one in which all the teachers agreed with the policy (agreement condition). A sample case, the class plans (more important) decision under disagreement conditions, is presented in Table 1 (the cases and adapted versions of the decision styles are available from the author).

Insert Table 1 about here

Procedure

Meeting in their individual schools, the teachers were all presented with a packet which included the adapted versions of the Vroom-Yetton decision styles, the two hypothetical case studies, and questions designed to measure the effectiveness of the manipulations and the effects of the manipulations on the dependent variables. (The order of presentation of the cases was counterbalanced.) The cases and questions were described in detail, and the teachers then completed and returned the packets.

As the packets were returned, the teachers' estimates of the best decision styles for obtaining high quality decisions and decision acceptance were quickly tabulated. The teachers were fed back their estimates of the best decision styles for achieving these outcomes and encouraged to discuss their meaning. The discussions were tape recorded and used as a qualitative basis for interpreting the quantitative results of the study.

Measures

Manipulation checks. Three manipulation check questions were used. The first asked the teachers to rank the five Vroom-Yetton decision styles according to the extent to which the styles were used in their school. This question measured the trained and untrained teachers' perceptions of the amounts of participation in their schools. The second question assessed the extent of agreement with the policy underlying the decision to be made in the case studies. The third assessed the extent to which the decisions in the cases were relevant (important) to the teachers' major interests.

Dependent variables. The participants ranked the five Vroom-Yetton decision styles according to the degree to which the styles were used in their school (manipulation check question) and according to the degree to which the styles would result in the following outcomes being achieved: 1) a high quality decision, i.e. all the objective facts of the case adequately considered and combined for an effective decision (c.f. Maier, 1970); 2) individual acceptance and implementation of the decision; 3) total faculty acceptance and implementation of the decision; and 4) according to the degree to which the teachers would like to use the decision styles. Vroom and Yetton (1973, p. 67) propose that the five decision styles vary along a unidimensional scale corresponding to the amount of participation opportunity afforded to subordinates. Vroom and Yetton assign the following values to these decision processes, based on the results of three scaling procedures; no participation = 0.00; request for individual information = .625; individual consultation = 5.00; group

consultation = 8.125; group participation or consensus = 10.00. Higher values represent greater opportunity for subordinate participation in decision-making. This scaling procedure, while adequately reflecting the comparative degree of participation available in each decision style, does not represent a normalized distribution of scores, which severely limits data analysis possibilities. To circumvent this problem, the actual dependent variables to be used for analysis were constructed by correlating the participants' original rankings of the five styles with the amount of participation opportunity afforded by each style. (The maximum and minimum values of the correlations were +.98 and -.98.) These correlations indicated the degree to which the teachers rated participation as likely to achieve each of the various outcomes, and were the dependent variables used in the research.

Results

The effectiveness of the manipulations

The trained teachers estimated that they were participating in decisions significantly more than did the untrained teachers (means were, respectively, .73 and .43); $t(87)=2.61$, $p < .01$.

The mean scores for the questions assessing agreement and importance are presented in Table 2. Analyses indicated that both manipulations were effective. The teachers perceived significantly more disagreement in cases which incorporated policy disagreement than in cases which did not $F(1,89)=103.31$, $p < .0001$. They also perceived the more important class plans case as significantly more important than the less important dress code case, $F(1,89)=8.91$, $p < .004$. However, the mean scores for the importance question indicate that both cases were perceived as important.

Insert Table 2 about here

Outcomes on the Case Studies

The mean scores for the different conditions on the four dependent variables (amounts of participation likely to achieve high quality decisions, individual and faculty acceptance of decisions, and the amount of participation the teachers would like to have) are presented in Table 3. Because the study employed a mixed design, the predictions were tested by means of multivariate repeated measures analyses of variance (Finn, 1969). Multivariate tests are most appropriate for repeated measures analyses, because they do not require homogeneity of variance.

Insert Table 3 about here

Two separate anlayses were conducted. The first used as dependent variables the three measures reflecting the amount of participation likely to achieve effective decisions (i.e. high quality decisions and individual and faculty acceptance of decisions). The second used as the dependent variable the amount of participation the teachers would like to have. The two analyses were conducted separately, because predictions were made only for the teachers' ratings of the amounts of participation likely to achieve effective decisions.

A summary of the results of the analyses of variance for the contrasts corresponding to each of the hypotheses is presented in Table 4.

Insert Table 4 about here

Hypothesis 1 predicted a main effect for participation training. Results of the analyses indicated that this hypothesis was not supported.

Hypothesis 2 predicted an interaction between agreement and participation training: agreement would not affect the trained teachers' ratings of the amount of participation likely to achieve effective decisions, but untrained teachers would rate the amount of participation likely to achieve effective decisions higher when there was disagreement than when there was agreement. Results indicated that the participation training - agreement interaction was significant on the measures assessing the amount of participation the teachers rated as likely to achieve effective decisions, multivariate $F(1,89)=4.43$, $p < .04$. Univariate analyses indicated that the effect was significant or approached significance for the measures of the amount of participation likely to achieve all three indices of effective decisions: high quality, $F(1,89)=3.09$, $p < .08$, individual acceptance, $F(1,89)$, $p < .05$, and faculty acceptance, $F(1,89)=5.35$, $p < .02$. In addition, this interaction was significant on the measure indicating the amount of participation the teachers would like to have, $F(1,89)=5.35$, $p < .02$.

Scheffé tests revealed that the interaction effect that occurred was somewhat more complicated than that predicted. On the more important case, agreement did not affect the amount of participation the trained teachers rated as likely to achieve effective decisions. On the less important case, trained teachers rated the amount of participation likely to achieve high quality decisions and individual acceptance of decisions higher when there was agreement than when there was disagreement. In addition, the trained teachers liked participating more when there was agreement than when there was disagreement on both cases.

On the more important case, the untrained teachers rated the amount of participation likely to achieve effective decisions (according to all three effectiveness criteria) higher when there was disagreement than when there was agreement. In addition, they liked participating more on this case when there was disagreement than when there was agreement. On the less important case, agreement had no effect on the amount of participation the untrained teachers rated as likely to achieve effective decisions or the amount of participation they would like to have.

Finally, Scheffé tests also revealed that whenever there was agreement, trained teachers liked participating more than did untrained teachers. However, when there was disagreement on the more important case, untrained teachers liked participating more than did the trained teachers.

Hypothesis 3 predicted a main effect for importance. Results of the analyses indicated that this hypothesis was not supported for measures of the amounts of participation likely to achieve effective decisions, but was supported for the measure of the amount of the amount of participation the teachers would like to have, $F(1,89)=10.90$, $p < .001$. However, Scheffé tests indicated that this effect occurred only for untrained teachers and then only when there was disagreement. Thus, it appeared that importance had its primary impact in interaction with other variables rather than acting independently.

Discussion

The results of this study indicate the existence of a three-way interaction between participation training, agreement, and importance. On the more important case, agreement did not affect the trained teachers'

ratings of the amount of participation likely to achieve effective decisions, while on the less important case, these teachers rated the amount of participation likely to achieve effective decisions higher when there was disagreement than when there was agreement. However, the trained teachers always liked participating more when there was agreement than when there was disagreement.

The pattern of results for the untrained teachers was almost the opposite of the trained teachers' pattern. On the more important case, the untrained teachers rated the amount of participation likely to achieve effective decisions and the amount of participation they would like to have higher when there was disagreement than when there was agreement. On the less important case, agreement did not affect these teachers' ratings. In addition, when there was disagreement, the untrained teachers liked participating more on the more important case than less important case.

A direct comparison of the patterns of the two groups is revealing. When there was agreement, the trained teachers liked participating more than did the untrained teachers. When there was disagreement, however, at least on the more important case, the untrained teachers liked participating more than did the trained teachers.

Implications of the Results

The effect of agreement for the untrained teachers was somewhat consistent with the hypotheses of this study. On the more important case, at least, these teachers were much less interested in participating in decisions they trusted would be made in their favor (decisions about which there was agreement) than decisions in which their outcomes could be significantly

improved by their participation. This effect did not occur on the less important case. It is consistent with March and Olsen's (1976) line of reasoning to suggest that agreement should have more impact on more important decisions than less important ones. The less important the decision, the less likely are the decision outcomes to be of sufficient value that extra effort to achieve them is worthwhile.

The untrained teachers have been participating in decision-making significantly less than the trained teachers. The results suggest that experience in participation changes teachers' participation preferences. Even when agreement did not affect their ratings of the amount of participation likely to achieve effective decisions, the trained teachers liked participation less when there was disagreement than when there was agreement. In addition, on the less important decision at least, trained teachers appeared to believe that participation would be less likely to achieve effective decisions when there was disagreement than when there was agreement. These results suggest that participation during conflict situations may have been a painful experience for the trained teachers, as well as one that decreased their hope that resulting decisions would always be highly effective. Cohen and March (1974) suggest that administrators who wish to reduce opposition to their ideas can best achieve that goal by encouraging subordinate participation in conflict situations and enabling the subordinates to ascertain for themselves how distasteful that participation is. The results for the trained teachers support that suggestion.

The data from the present study represent the teachers' perceptions.

But behavioral results obtained in a laboratory study by Bartunek, Benton, and Keys (1975) are congruent with the present results and indicate their validity. In the Bartunek et al. study, bargainers who were facing difficult conflict situations preferred to have third parties make decisions for them about means of resolving their conflicts rather than to make such decisions on their own. Moreover, they were much more likely to accept such third party suggestions than were bargainers encountering less difficult conflict. The outcome in that study is similar to the trained teachers' desire in the present study for less participation when there was disagreement than when there was agreement.

In the Bartunek et al. study the mechanism causing decreased interest in decision-making was a desire to save face. The trained teachers' discussions following data collection in the present study suggested some hopelessness on their part that effective group decisions would be reached when disagreement was present. Thus, results of both the Bartunek et al. study and the present research suggest that dealing with differing opinions is an emotion-provoking and difficult task for a dyad or group. The task is difficult even when participants have received training in conflict management and the conflict or disagreement revolves around the substantive issues being discussed rather than personal differences.

The comparative lack of effect of the importance manipulation probably occurred because both cases addressed classroom issues. Mohrman, Cooke, and Mohrman (1978) have recently divided the types of decisions in which teachers might participate into two major domains, classroom or instructional, and managerial. Mohrman et al. found that it is more important to teachers to

participate in instructional decisions than managerial decisions. Thus, the fact that the teachers rated both cases as important is congruent with the Mohrman et al. results. However, these authors also noted that teachers seldom participate in managerial decisions. During the interviews with the principals conducted prior to the data collection phase of the present study, the principals rarely described any decisions in the managerial doman as feasible decisions for teacher participation. It would appear that when school administrators contemplate the problems for which teacher participation might be appropriate, the range of issues they consider is fairly narrow, but does include the decisions in which teachers express most interest.

The results of this study do suggest that when decisions bear some minimal level of importance, the comparative importance or relevance of the issues may not be the primary determinant of employee willingness to participate in decisions. The primary determinant may be importance in conjunction with other factors, such as disagreement, which add substantial costs to participation. Thus, when there was disagreement, the untrained teachers liked participation more on the more important case than on the less important case. When participation costs are minimal, employees may be able to sustain participation in comparatively less important decisions.

Implications of the results for Contingency Models of Particpation

Dachler and Wilpert (1978) suggest that organizational attributes are likely to interact with decision characteristics to affect the efficacy of participation. The results of the present study lend support to that suggestion. In addition, they indicate one form such interactions may take: the

learnings and experiences of organization members are likely to condition their reactions to characteristics of the decision they are facing. The present results suggest the importance of continued investigation of the interactive effects on participation of decision and organizational characteristics.

In the present study, participation training and experience appeared to reduce employee desires for participation when the employees were aware of the existence of disagreement. This outcome was similar to Alutto and Belasco's (1972) finding that some employees may reach a state of "decisional maturation," according to which they are participating in decisions to a greater extent than they prefer. The present results suggest that for employees with considerable participation experience, the presence of disagreement may induce a state similar to decisional saturation. Thus, the results suggest the importance of further exploration of factors which may cause employees to desire less participation. The results also suggest the value of exploring employee feelings and experiences during participation, as well as the dynamics of conflict in decision-making groups. Investigations such as these represent ways in which contingency models of participation can usefully be developed.

Implications of the Research for Training in Participative Decision-Making

There is little in the participative decision-making or OD literature which emphasizes the pain that may accompany even successful conflict management. It would be useful for practitioners to acknowledge more openly that dealing with disagreement is not easy, especially when employees are not in a workshop setting and trained facilitators are not present. In addition to

acknowledging such possible painful effects of conflict management, practitioners might also develop methods of training which decrease the probability of organizational members reducing their interest in confronting difficult conflicts over time. These methods might include means of "checking in" with participants from time to time outside workshop settings, to help the participants resolve conflicts that arise among them and to reflect on their conflict management processes.

Finally, the results suggest that practitioners would do well to incorporate contingency models of participation into their training. In the present study, untrained teachers appeared better able than trained teachers to clearly distinguish occasions on which participation would be more or less useful. Training which merely emphasizes the importance of participation may lead employees to participate in decisions of little interest to them at first, and eventually even lose interest in participation, especially when such participating necessitates dealing with conflict.

References

ALUTTO, J.A. & BELASCO, J.A. A typology for participation in organizational decision making. Administrative Science Quarterly, 1972, 17, 117 - 125.

BARTUNEK, J. BENTON, A., & KEYS, C.B. Third party intervention and the bargaining behavior of group representatives. Journal of Conflict Resolution, 1975, 19, 532 - 557.

BECKHARD, R. Organization development: strategies and models. Reading, Mass.: Addison-Wesley, 1969.

COHEN, M., & MARCH, J.G. Leadership and ambiguity. New York: McGraw-Hill, 1974.

DACHLER, H.P. & WILPERT, B. Conceptual dimensions and boundaries of participation in organizations: a critical evaluation. Administrative Science Quarterly, 1978, 23, 1 - 39.

FINN, J.D. Multivariate analysis of repeated measures data. Multivariate Behavioral Research, 1969, 4, 391 - 413.

HUSE, E.F. Organization development and change. St. Paul: West, 1975.

JOHNSON, D.W. & JOHNSON, F.P. Joining together: group theory and group skills. Englewood Cliffs: Prentice-Hall, 1975.

KEYS, C., & BARTUNEK, J. Organization development in schools: goal agreement, process skills, and diffusion of change. Journal of Applied Behavioral Science, in press.

KEYS, C., MARTELL, R., PELTZ, J., BARTUNEK, J., & SZAFLARSKI, T. Assessing organizational renewal: an evaluation of project START. Unpublished paper, Department of Psychology, University of Illinois at Chicago Circle, 1975.

LOCKE, E. & SCHWEIGER, D. Participation in decision-making: one more look.

In B. Staw (Ed.), Research in organizational behavior. Greenwich, Conn.: JAI Press, 1979.

LOWIN, A. Participative decision-making: a model, literature critique, and prescription for research. Organizational Behavior and Human Performance, 1968, 3, 68-106.

MAIER, N.R.F. Problem-solving and creativity in individuals and groups. Belmont, Cal.: Brooks/Cole, 1970.

MARCH, J.G. & OLSEN, J. Ambiguity and choice in organizations. Bergin, Norway: Universitetsforlaget, 1976.

MILES, R. Theories of Management. New York: McGraw-Hill, 1975.

MOHRMAN, A.M., COOKE, R.A., & MOHRMAN, S.A. Participation in decision making: a multidimensional perspective. Educational Administration Quarterly, 1978, 14, 13 - 29.

OWENS, R.G. Organizational behavior in schools. Englewood Cliffs: Prentice-Hall, 1970.

SCHMUCK, R. Developing collaborative decision-making: the importance of trusting, strong, and skillful leaders. Educational Technology, 1972, 12, 43 - 47.

SCHMUCK, R., RUNKEL, P., SATUREN, S., MARTELL, R. & DERR, C.B. Handbook of organization development in schools. Palo Alto: National Press Books, 1972.

SIMON, H. Administrative behavior (3rd ed.). New York: McMillan, 1976.

VROOM, V. & JAGO, A. On the validity of the Vroom-Yetton model. Journal of Applied Psychology, 1978, 63, 151 - 162.

VROOM, V. & YETTON, P. Leadership and decision-making. Pittsburgh: University of Pittsburgh Press, 1973.

Table 1

Sample Case Study: Goal Disagreement, Important Decision Version

---

You are a fifth grade teacher. It is September of your second year of teaching at your school. You are one of ten teachers who are affected by whatever decision is made in this case.

Your school has a policy regarding class plans that was formulated four years ago by the school administration and is still in effect. The policy states that, "Class plans must be haded in on a regular basis, at least once a month." The policy does not state that the plans must be handed in only once a month; they can be handed in more often. Nor does it state the amount of detail the plans should include (e.g. whether only indication of what is to be covered is enough or whether detailed behavioral objectives and ways of measuring their attainment are necessary). The teachers' handbook states that the policy is to be reviewed annually by the administration with regard to the exact number of times the plans are to be turned in and the form they will take. This decision is to be made by October of each year for that school year. The faculty who are affected by the decision are expected to abide by it. As you know from experience, the more times you turn in the plans and the more detail they require the more work you will have to do to prepare them.

You are aware from informal discussions outside of school with the other teachers who are affected by the decision that there is some disagreement among them regarding the class plans policy. Some teachers feel that the policy is a good one, and should be maintained. Several of these have ideas as to what form the plans should take, and they would

like these ideas incorporated in some way in the final decision. Other teachers disagree with the policy. They believe that a basic plan should be handed in at the beginning of the year and a record of what was covered in class handed in at the end, but feel that submitting class plans more often than this is a waste of time. The principal did not take part in the informal discussions, and thus does not know the teachers' feelings on the subject.

The principal has chief responsibility for the decision to be made about the frequency and form of the class plans. However, there are a number of options she has as to how the decision can be made.

Table 2

Mean Scores on Questions Assessing Agreement and Importance of the Case Studies

Case	Decision Characteristic	Teachers	
		Trained	Untrained
Agreement/More Important Decision	Agreement	1.64	2.28
	Importance	3.41	3.55
Agreement/Less Important Decision	Agreement	2.24	1.96
	Importance	2.88	3.17
Disagreement/More Important Decision	Agreement	3.67	3.69
	Importance	3.28	3.55
Disagreement/Less Important Decision	Agreement	3.61	3.69
	Importance	2.72	2.72

Note. The range of scores on the questions assessing each of the decision characteristics was from 1 to 4. 1 represented agreement and an unimportant decision. 4 represented disagreement and an important decision.

Table 3

Outcomes on the Case Studies

Condition	Amounts of Participation Likely to Achieve Effective Decisions			Amount of Participation the Teachers Would Like
	high quality decisions	individual acceptance of decisions	faculty acceptance of decisions	
Trained teachers				
Agreement				
More Important Decision	.82	.74	.77	.88
Less Important Decision	.81	.88	.77	.84
Disagreement				
More Important Decision	.75	.69	.67	.51
Less Important Decision	.58	.59	.64	.57
Untrained Teachers				
Agreement				
More Important Decision	.58	.62	.62	.61
Less Important Decision	.73	.70	.74	.58
Disagreement				
More Important Decision	.78	.82	.85	.77
Less Important Decision	.73	.73	.82	.56

Table 4

Summary Table of Analyses of Variance Testing the Hypotheses

Contrast	Dependent Varaibles	Multivariate F	p	Univariate F	p
1. Main effect of participation training (H1)	Effectiveness[a]	<1			
	Quality				
	Individual Acceptance				
	Faculty Acceptance				
	Like[b]			<1	
2. Interaction between participation training and agreement (H2a and H2b)	Effectiveness[a]	4.43	<.04		
	Quality			3.09	<.08
	Individual Acceptance			3.80	<.05
	Faculty Acceptance			4.37	<.04
	Like[b]			5.35	<.02
3. Main effect of importance (H3)	Effectiveness[a]	<1			
	Quality				
	Individual Acceptance				
	Faculty Acceptance				
	Like[b]			10.90	<.001

Note. df = 1,89

[a] Amount of participation likely to achieve effective decisions

[b] Amount of participation the teachers would like to have